

Claims

What is claimed is:

- Sub Q17*
1. A fluid system for an internal combustion engine, said internal combustion engine including a head assembly having at least one subsystem positioned therein, said fluid system comprising:
hydraulic fluid; and
a fluid pump operatively supplying said hydraulic fluid to the head assembly and being used solely for actuating the at least one subsystem positioned in the head assembly of the internal combustion engine.
 2. The fluid system of claim 1, wherein said fluid system includes a high pressure fluid manifold.
 3. The fluid system of claim 2, including a heat exchanger operatively connected between the fluid pump and the high pressure manifold.
 4. The fluid system of claim 1, including a heater adapted for maintaining the hydraulic fluid at a predetermined temperature.
 5. The fluid system of claim 1, wherein said hydraulic fluid is used to actuate a fuel injection system.
 6. The fluid system of claim 1, wherein said hydraulic fluid is used to actuate an exhaust valve actuation system.
 7. The fluid system of claim 6, wherein said exhaust valve actuation system is a compression release brake system.

8. The fluid system of claim 1, where said hydraulic fluid is used to actuate an intake valve actuation system.

9. An internal combustion engine comprising:
a head assembly;
at least one subsystem positioned within said head assembly; and
a fluid system being fluidly coupled to and used solely for actuating at least one of said subsystems.

10. The internal combustion engine of claim 9, wherein at least one of said subsystems is a fuel injection system.

11. The internal combustion engine of claim 9, wherein at least one of said subsystems is an exhaust valve actuating system.

12. The internal combustion engine of claim 11, wherein said exhaust valve actuating system being a compression release brake system.

13. The internal combustion engine of claim 9, wherein at least one of said subsystems is an intake valve actuation system.

14. The internal combustion engine of claim 13, being a camless engine.